

**What is claimed is:**

1. A storage service method, comprising:  
monitoring a storage capacity of a data  
5 accumulation unit of a user terminal device; and  
transferring data of the data accumulation  
unit to a storage service providing device through  
a network such that the free capacity cannot be  
smaller than a predetermined value.  
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2. The method according to claim 1, wherein:  
said user terminal device detects whether or  
not data is deleted or updated; and  
when data is deleted or updated, the data  
15 before deletion or update is transferred to the  
storage service providing device.
3. The method according to claim 1, wherein:  
a use frequency of data in the user terminal  
20 device is determined; and  
data is sequentially transferred to the  
storage service providing device in order from  
lowest use frequency such that the free capacity of  
the data accumulation unit cannot be smaller than  
25 the predetermined value.

4. The method according to claim 1, wherein:  
policy information defining a process of data  
is added to the data; and

5 when said data is transferred from the data  
accumulation unit to the storage service providing  
device, the data to be transferred is selected  
according to the policy information.

10 5. A storage service method, comprising:  
determining whether or not data is deleted or  
updated in a user terminal device;

in case data is deleted or updated,  
transferring the data before deletion or update  
15 from the user terminal device to a storage service  
providing device; and

storing the transferred data in the storage  
service providing device.

20 6. A storage service user terminal device,  
comprising:

a data accumulation unit accumulating data;

a free capacity monitor unit monitoring a free  
capacity of said data accumulation unit; and

25 a data transfer unit transferring the data of

said data accumulation unit to a storage service providing unit through a network such that the free capacity of said data accumulation unit cannot be smaller than a predetermined value based on a  
5 monitor result of said free capacity monitor unit.

7. The device according to claim 6, further comprising

a detection unit detecting whether or not data  
10 is deleted or updated, wherein

when said detection unit detects that data is deleted or updated, said data transfer unit transfers the data before deletion or update to said storage service providing device.

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8. The device according to claim 6, further comprising

a use frequency determination unit determining a use frequency of data accumulated in said data  
20 accumulation unit, wherein

said data transfer unit sequentially transfers the data in order from lowest use frequency based on a determination result of said use frequency determination unit.

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9. The device according to claim 6, wherein:

said data accumulation unit stores data with policy information defining a process of the data added to the data; and

5 when data is transferred from said data accumulation unit to said storage service providing device, data to be transferred is selected according to the policy information.

10 10. The device according to claim 6, further comprising

a data determination unit determining whether or not data to be used has been transferred to the storage service providing device, wherein

15 when said data determination unit determines that the data has been transferred to the storage service providing device, said data transfer unit downloads the data from the storage service providing device.

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11. The device according to claim 6, further comprising

an update date determination unit determining an update date of data, wherein

25 said data transfer unit selects data of an

earlier update date as transfer data.

12. The device according to claim 6, further comprising

5 a relevant data determination unit determining whether or not relevant data exists, wherein

when said relevant data determination determines that there is relevant data, said data transfer unit simultaneously transfers other data  
10 relevant to the data to said storage service providing device.

13. The device according to claim 6, wherein

said data transfer unit comprises an upload  
15 unit and a download unit respectively uploading the data in said data accumulation unit into said storage service providing device when said free capacity of said data accumulation unit is close to the predetermined value and downloading necessary  
20 data from said storage service providing device.

14. A storage service providing device, comprising:

a reception unit receiving data to be uploaded  
25 from a user terminal device through a network to

reserve a free capacity such that a free capacity of a data accumulation unit of the user terminal device cannot be smaller than a predetermined value;

- 5           a data accumulation unit storing data;
- a data read unit reading data when the user terminal device requests the data to be downloaded;
- and
- a transmission unit downloading the data read
- 10       from said data accumulation unit into the user terminal device.

15. The device according to claim 14, further comprising:

- 15           a difference generation unit generating a difference between the data received by said reception unit and past data stored in said data accumulation unit; and
- data storage unit storing the difference data
- 20       generated by said difference generation unit in said data accumulation unit.

- 16. A computer-readable storage medium storing a storage service program used to direct a computer
- 25       to perform the process comprising:

monitoring a free capacity of a data accumulation unit of a user terminal device; and

transferring data in said data accumulation unit to a storage service providing device through  
5 a network such that the free capacity cannot be smaller than a predetermined value.

17. The storage medium according to claim 16, wherein:

10 it is determined whether or not data is deleted or updated in the user terminal device; and

when data is deleted or updated, the data before deletion or update is transferred from the user terminal device to the storage service  
15 providing device.